

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/765,357	. 01/22/2001	Hsin Chia Fu	MR1035-490/DIV	9009	
75	90 08/11/2004	X.	EXAM	INER	
Rosenberg, Klein & Bilker 3444 Ellicott Center Drive-Suite 105			WONG, ALLEN C		
Ellicott City, MD 21043			ART UNIT	PAPER NUMBER	
•			2613	2	
			DATE MAILED: 08/11/2004	MAILED: 08/11/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

•	Application No.	Applicant(s)				
	09/765,357	FU ET AL.				
Office Action Summary	Examiner	Art Unit				
	Allen Wong	2613				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period of the period of the period for reply within the set or extended period for reply will, by statute any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be timy within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONEI	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status		•				
1) Responsive to communication(s) filed on						
2a) This action is <b>FINAL</b> . 2b) ⊠ This	This action is <b>FINAL</b> . 2b) This action is non-final.					
•	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims		•				
4) ☐ Claim(s) 1-7 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-7 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or						
Application Papers						
9) The specification is objected to by the Examine		-construction				
10) The drawing(s) filed on is/are: a) accomplicant may not request that any objection to the						
Replacement drawing sheet(s) including the correct		• •				
11)☐ The oath or declaration is objected to by the Ex		, ,				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Application ity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage				
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/Mail Da 5)  Notice of Informal Pa 6) Other:	ite atent Application (PTO-152)				
Potential Trademark Office	- · · · · · · · · · · · · · · · · · · ·					

Art Unit: 2613

#### **DETAILED ACTION**

#### **Drawings**

The drawings are objected to because there are spelling errors in figs. 1, 3A, 3B and 5. The term "video" should be used instead of the term "vidio" as shown in applicant's figures. Correction is required.

### Specification

In the specification, on lines 14 and 31 of page 5, line 18 of page 6, line 18 of page 8, lines 6-7 and 22 of page 11, the term "trancoder" should be changed to "transcoder". Appropriate correction is required.

## Claim Objections

1. Claim 6 is objected to because of the following informalities: Claim 6 is not a complete sentence. After "a certain bandwidth", a semicolon is necessary to separate limitations.

Claim 7 is objected to because of the following informalities: the word "trancoder" should be changed to "transcoder". Appropriate correction is required.

#### Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2613

3. Claims 1, 3, 4 and 6-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Wang (6,167,084).

Regarding claim 1, Wang discloses a method for compressing and restructuring video signals to promote the usefulness of a video channel (figs.1 and 6), comprising the steps of:

- (a) processing a plurality of digital video data streams to form digital video data streams each having a desired bandwidth (fig.6, elements 620, 630, 640 and 650 are plural video compressors that compress digital video data streams, where each digital video data stream has a certain bandwidth or bit-rate R); and
- (b) integrating the digital video data streams having said desired bandwidth into an integrated digital video data stream having a bandwidth fitting said video channel (fig.6, element 660 is a multiplexer that integrates the digital video data streams having said desired bandwidth into an integrated digital video data stream having a bandwidth regulated for the video channel).

Regarding claim 3, Wang discloses the method according to claim 1 wherein in step (b) a multiplexer is used to integrate the digital video data streams having said desired bandwidth (fig.6, element 660).

Regarding claim 4, Wang discloses wherein said digital video data stream is the video data having been compressed by MPEG2 (col.2, In.13-14).

Regarding claim 6, Wang discloses a device for compressing and restructuring video signals to promote the usefulness of a video channel (fig.1 and 6), comprising:

Art Unit: 2613

a plurality of video compressors each compressing a digital video data stream applied thereto into a digital video data stream having a certain bandwidth (fig.6, elements 620, 630, 640 and 650 are plural video compressors that compress digital video data streams, where each digital video data stream has a certain bandwidth or bit-rate R); and

a multiplexer receiving the digital video data streams having said certain bandwidth to provide a digital video data stream having a desired bandwidth (fig.6, 660).

Regarding claim 7, Wang discloses wherein said video compressor comprises a transcoder for compressing the bit rate of the digital video data stream applied thereto (fig.6, note elements 640 and 650 are plural video compressors that comprise of transcoders, and also, Wang's col.8, In.31-33 discloses that there can be numerous or a plurality of digital video bitstreams or data streams, where L is the number of transcoders that is capable of processing the plurality of digital video data streams).

## Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wang (6,167,084) in view of Birch (5,493,339).

Art Unit: 2613

Regarding claim 2, Wang discloses the method according to claim 1 wherein step (a) comprises the steps of: compressing each of said plurality of digital video data streams into a digital video data stream having a certain bandwidth (fig.6, elements 620, 630, 640 and 650 are plural video compressors that compress digital video data streams, where each digital video data stream has a certain bandwidth or bit-rate R); inputting the digital video data streams having said certain bandwidth to multiplexers for forming digital video data streams having said desired bandwidth.

Although Wang does not specifically teach the use of multiple multiplexers, however, Birch teaches the use of multiple multiplexers for receiving multiple digital video data streams (fig.6, note from PROGRAMMER 1 to PROGRAMMER N, each service encoder 112 has a multiplexer 124 to collect multiple programs 1 to N). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Wang and Birch, as a whole, for conforming to the industrial standards of transmitting all types of digital video data streams to multiple users from a plurality of programs or sources so as to enhance the cable, satellite television viewing experience (Birch col.4, In.32-40).

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wang (6,167,084) in view of Young (5,923,642).

Regarding claim 5, Wang discloses the use of bandwidth regulation of the video channel (fig.6, note there is a rate control processor 610 that utilizes the output of element 660 for checking the buffer fullness of the data in buffer 670 so as to appropriately, efficiently allocate the number of bits suited to encode the streaming

Art Unit: 2613

Page 6

video data, thus achieving the desired bandwidth or bit-rate). Wang fails to specifically disclose wherein the bandwidth of said video channel is the bandwidth of an analog TV video channel of 6 MHz. However, Young discloses that it is well known to one of ordinary skill in the art that the industry standard bandwidth of an analog TV video channel is 6 MHz (col.1, In.20-23). Therefore, it would have been obvious to one of ordinary skill in the art to incorporate the teachings of Wang and Young, as a whole, for permitting the use of multiple channel transmission and distribution in the least financially costly manner while maintaining optimum quality service (Young col.3, In.64-67).

#### **Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen Wong whose telephone number is (703) 306-5978. The examiner can normally be reached on Mondays to Thursdays from 8am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (703) 305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Allen Wong Examiner

Art Unit 2613

AW 8/5/04